Please add the following new claims:

28. The tracklaying vehicle according to claim 1, wherein the additional device may be selected from a rotary snow plow or a front snow blower.

29. The tracklaying vehicle according to claim 1, wherein said vehicle has one electric motor such that a steering gear is arranged for the drive sprocket of each track.

NOT SPECIES 1

REMARKS

The present preliminary amendment is submitted in order to correct the improper multiple dependency of claims as originally filed, to conform the application with U.S. practice and to incorporate the changes made in the parent application.

Examination on the merits is respectfully requested.

Respectfully submitted,

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PATENT & TRADEMARK OFFICE

Version Showing Changes Made

IN THE SPECIFICATION:

The following paragraph has been inserted beginning on page 1, before line 1:

BACKGROUND OF THE INVENTION

The paragraph beginning on page 1, line 1 has been amended as follows:

The present invention relates to a piste-maintenance tracklaying vehicle. [~~comprising an internal combustion engine which is drivingly connected, preferably via a gear, to a drive sprocket of each track, and accessory drives for additional devices that are mountable on the piste-maintenance vehicle, such as rotary snow plow, front snow plow blower, or the like, and/or for vehicle components, such as a tilting device for platform and driver's cab or for track tensioning.~~]

The paragraph beginning on page 1, line 8 has been amended as follows:

[~~Such a tracklaying vehicle is known in practice, with hydrostatic drive being normally provided for the tracks. The drive is operated by the internal combustion engine, with a gear being optionally provided between internal combustion engine and hydrostatic gear or drive sprocket for controlling the individual tracks. Furthermore, such a tracklaying vehicle has a number of additional devices, such as a rotary snow plow, a front snow plow blower, a winch drive, or the like. Furthermore, adjusting mechanisms for the corresponding device carriers or for a snow clearing blade are provided for the additional devices or also for further vehicle means, tilting devices are provided, for instance, for the driver's cab or a platform, as well as a track tensioner, or the like.~~] Such a vehicle is known from WO94/09548. In the prior-art vehicle, an electric motor for a drive wheel of a track is driven by an internal combustion engine via a generator. In the overrun mode, the electric motor can be switched as a current generator for accessory drives of the vehicle. Such accessory drives are intended for additional devices that are mountable on the piste-maintenance vehicle, such as a rotary snow

plow, a front snow plow blower, or the like, and/or for vehicle components, such as a tilting device for platform and driver's cab or for track tensioning.

The paragraph beginning on page 1, line 18 has been amended as follows:

The prior-art tracklaying vehicle has the disadvantage that [~~the hydrostatic drive for the tracks is relatively heavy and the total drive system for the tracklaying vehicle is of a relatively poor efficiency.~~] for instance electric motors for a snow plow shaft are directly controlled by a high-performance control unit, without any information being furnished on a dependence of such a control unit on the vehicle speed, or the like.

The following paragraph has been inserted beginning on page 2, before line 1:

SUMMARY OF THE INVENTION

The paragraph beginning on page 2, line 1 has been amended as follows:

It is therefore the object of the present invention to improve a tracklaying vehicle of the above-mentioned type in such a manner that [~~the tracklaying vehicle is more lightweight with the positive characteristics of the prior-art drive of the tracklaying vehicle being maintained, and that the efficiency of the tracklaying vehicle drive is increased at the same time, as well as the uniformity of piste maintenance~~.] a uniform piste maintenance of an unvarying high quality is ensured independently of the vehicle speed or an uphill or downhill driving of the vehicle.

The paragraph beginning on page 2, line 7 has been amended as follows:

In a tracklaying vehicle [~~comprising the features of the preamble of claim 1,~~]this object is achieved in that the [~~internal combustion engine is connected via a generator and at least one electric motor and possibly via a gear to each drive sprocket and that in the overrun mode the~~

~~electric motor is switchable as a current generator for accessory drives designed as electrohydraulic or electric drives, with at least the electric drive for a shaft of the snow plow being synchronized with the electric motor of the drive sprocket.~~ electric drive for a shaft of the snow plow is synchronized with the electric motor for the drive sprocket. It is thus possible to adapt snow plow shaft speed and travel speed to one another, resulting in a defined number of tooth engagements of the snow plow shaft per distance covered.

The paragraph beginning on page 2, line 15 has been amended as follows:

~~[In comparison with a known hydrostatic drive, the inventive use of generator and of at least one electric motor yields an equally good protection against and resistance to environmental factors and overloading. At the same time, the electric motor permits a precise control of the power transmission; due to the increased efficiency of the electric drive system the latter yields an identical or even increased tractive force on the drive sprocket and a vehicle performance comparable to or even better than that of hydrostatic drive.]~~ Furthermore, in comparison with hydrostatic drives that are known in practice, one generally obtains an equally good protection against and resistance to environmental factors and overloading. The electric motor permits a precise control of the power transmission. Due to the increased efficiency of the electric drive system the latter yields an identical or even increased tractive force on the drive sprocket and a vehicle performance comparable to or even better than that of a hydrostatic drive.

The paragraph beginning on page 2, line 23 has been amended as follows:

~~[In the absence of all of the hydraulic components of the hydrostatic drive in the drive train, the inventive use of generator and electric motor considerably reduces the weight for the~~

~~tracklaying vehicle. Furthermore, difficulties which might arise from sealing and from the hydraulic medium supply of the hydrostatic drive are not observed.~~] Since all of the hydraulic components of a hydrostatic drive in the drive train are no longer needed, the weight of the piste-maintenance vehicle is considerably reduced, and all difficulties that might arise from sealing and from the hydraulic medium supply of a hydrostatic drive are no longer observed.

The paragraph beginning on page 3, line 8 has been amended as follows:

In addition to[~~an improved~~] a good efficiency of the drive system, such an energy feedback effects a further reduction of the energy consumption, as the energy gained can for instance be used directly for operating the accessory drives for the additional devices.

The paragraph beginning on page 3, line 24 has been amended as follows:

~~[To ensure a defined number to tooth engagements of the snow plow shaft per distance covered, and thus uniform piste maintenance work, it further turns out to be of advantage when the electric drive for the snow plow shaft is synchronized with the electric motor for the drive sprocket. The shaft speed and traveling speed can thus be adapted to each other.]~~

The following paragraph has been inserted beginning on page 11, before line 23:

BRIEF DESCRIPTION OF THE DRAWINGS

The paragraph beginning on page 11, line 27 has been amended as follows:

Fig. 3 is a side view of a first embodiment of a tracklaying vehicle;[and]

The paragraph beginning on page 12, line 1 has been amended as follows:

Fig. 4 is a side view of a further embodiment of a tracklaying vehicle of the invention[.] ; and

The following paragraphs have been inserted beginning on page 12, after line 1:

Fig. 5 is a side view of a further embodiment of a tracklaying vehicle of the invention.

DETAILED DESCRIPTION OF THE DRAWINGS

The paragraph beginning on page 15, line 6 has been amended as follows:

The tracklaying vehicle 1 comprises as further vehicle components 15, 16 a loading platform 31 and a driver's cab 32. These parts are tiltable by electric or electrohydraulic drives [~~(not shown)~~] 52.

The paragraph beginning on page 15, line 10 has been amended as follows:

A control block 22 and 23, respectively, is arranged at the front and at the rear of the tracklaying vehicle 1. By analogy with Fig. 1, the block is designed with an electrohydraulic drive 18 as the accessory drive 6. These control blocks 22, 23 serve, for instance, to operate an adjusting means for push frame, [~~front snow plow blower~~] or device carrier, which are not illustrated for the sake of simplicity. Reference numerals 9 and 18a outline only the principle of a front snow plow blower to be arranged on the corresponding front device carrier 18a of the tracklaying vehicle 1.

The paragraph beginning on page 16, line 11 has been amended as follows:

Further additional devices or vehicle components, such as track tensioner 56, parking brake 58, [~~front device carrier, or the like, are not shown in Figs. 3 and 4 for reasons of simplification~~] snow plow blower or the like shown in Figs. 3, 4 and 5.

IN THE CLAIMS:

Claim 1 has been amended as follows:

1. (Amended) A piste-maintenance tracklaying vehicle [(1)] comprising a vehicle control unit and an internal combustion engine [(2)] which is drivingly connected[, preferably] via a gear [(3, 13, 14),] to a drive sprocket [(4)] of [each] at least one track [(5)], and accessory drives [(6)] for additional devices [(7, 8, 9)] that are mountable on said tracklaying vehicle [(1)], [such as rotary snow plow, front snow plow, or the like,] and/or for vehicle components [(15, 16, 17)], such as a tilting device for a platform and driver's cab or track tensioner, [characterized in that said] with an internal combustion engine [(2) is] being connected via a generator [(10)] and at least one electric motor [(11, 12)] and [possibly] a gear [(13, 14)] to each drive sprocket [(4)], and in overrun mode [said] an electric motor [(11, 12) is] being switchable as a current generator for accessory drives [(6)] designed as electrohydraulic or electric drives [(18, 19)], wherein at least said electric drive [(19)] for a shaft of said [rotary snow plow being] additional device is electrically synchronized with the electric motor [(11, 12)] of said drive sprocket [(4)] through the vehicle control unit.

Claim 2 has been amended as follows:

2. (Amended) The tracklaying vehicle according to claim 1, [characterized in that] wherein each drive sprocket [(4)] is drivingly connected to a separate electric motor [(11, 12)].

Claim 3 has been amended as follows:

3. (Amended) The tracklaying vehicle according to claim 1[or 2, characterized in that] , wherein [a] the planetary gear [(13, 14)] is arranged between the electric motor [(11, 12)] and the drive sprocket [(4), and a steering gear (3) is arranged in the case of only one electric motor (11, 12) for the drive sprocket (4) of both tracks (5)].

Claim 4 has been canceled without prejudice or disclaimer.

Claim 5 has been amended as follows:

5. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 1, wherein said tracklaying vehicle [(1)] is designed with an energy buffer [(20) which can be] fed by said generator [(10)] or by said electric motor [(11, 12)] which operates as a generator.

Claim 6 has been amended as follows:

6. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 1, wherein said tracklaying vehicle [(1)] further comprises an electronic high-performance means [(21)] for controlling travel engines or motors [(2, 11, 12)] and/or accessory drives [(6)].

Claim 7 has been amended as follows:

7. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 1, wherein said internal combustion engine [(2)] comprises an electronic engine control.

Claim 8 has been canceled without prejudice or disclaimer.

Claim 9 has been amended as follows:

9. (Amended) The tracklaying vehicle according to [any one of the preceding claims, characterized in that] claim 6, wherein said electronic high-performance means [(21)] is centrally arranged in said tracklaying vehicle [(1)] for distributing energy to all consumers [(6 to 9, 11, 12, 15 to 24)] and for energy feedback.

Claim 10 has been amended as follows:

10. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 1, wherein all components [(2, 3, 6 to 12, 15 to 25)] of said tracklaying vehicle are composed in the manner of modules.

Claims 11-16 have been canceled without prejudice or disclaimer.

Claim 17 has been amended as follows:

17. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 6, wherein a heating means of said tracklaying vehicle [(1)] is fed with waste feed from the motors [(11, 12)] of the hydraulic system [(18)] and/or said electronic high-performance means [(21)].

Claim 18 has been amended as follows:

18. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 6, wherein said tracklaying vehicle [(1)] comprises at least one setpoint transmitter for at least the desired traveling speed.

Claim 19 has been amended as follows:

19. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 18, wherein said electronic high-performance means [(21)] or [said] a vehicle control unit, respectively, is connected to said setpoint transmitter and comprises an electronic evaluation means at least for determining consumption-optimum speeds for said internal combustion engine [(2)].

Claims 20 and 21 have been canceled without prejudice or disclaimer.

Claim 22 has been amended as follows:

22. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 18, wherein said setpoint transmitter is designed as an accelerator for controlling speed and for braking purposes.

Claim 23 has been amended as follows:

23. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 18, wherein [the] a predetermined setpoint is a setpoint of the electric motor speed.

Claim 24 has been amended as follows:

24. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 23, wherein the setpoint is convertible by the electronic means into a speed which is predetermined for said internal combustion engine.

Claim 25 has been amended as follows:

25. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 6, wherein said electronic means comprises a characteristics control [unto] for determining the consumption-optimum speed.

Claim 26 has been amended as follows:

26. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 1, wherein said vehicle has a safety logic for starting and stopping purposes, said logic sensing at least the position of a traveling direction switch, the actuation of said accelerator and of said parking brake.

Claim 27 has been amended as follows:

27. (Amended) The tracklaying vehicle according to [at least one of the preceding claims, characterized in that] claim 1, wherein said parking brake is automatically operable.

The following new claims were added:

28. The tracklaying vehicle according to claim 1, wherein the additional device may be selected from a rotary snow plow or a front snow blower.

29. The tracklaying vehicle according to claim 1, wherein said vehicle has one electric motor such that a steering gear is arranged for the drive sprocket of each track.